

SOA Course Content

Overview of SOA

-) Integrating business processes with SOA
-) Deriving services from the organization's purpose
-) Merging SOA design and project management processes

Architecting Services

Service-oriented design process

-) Progressing from conceptual to buildable services
-) Structuring business requirements into an SOA
-) Aligning services with the organization

Turning services into modern applications

-) Working forward to deliver applications
-) Realizing the key SOA design patterns

Mapping Services to Your Organization

Discovering conceptual services

-) Defining the service domain
-) Recognizing service opportunities
-) Drilling down into atomic services
-) Consolidating into composite services

Refining the conceptual design

-) Identifying the underlying resource for the service
-) Selecting services to include in the SOA
-) Merging existing assets with new opportunities

Modeling Services

Developing logical services

-) Integrating consumers
-) Exploiting the five composition styles
-) Bus
-) Hierarchical
-) Star
-) Network
-) Circular

Achieving effective designs

-) Supporting loose coupling
-) Establishing relationships between services
-) Handling sequential processing

Addressing the business needs

-) Designing for reuse and integration
-) Decomposing to create reusable services

Factoring in brokers

-) Identifying "services for services"
-) Leveraging the seven categories of brokers

Converting Designs into Specifications

Specifying operations

-) Deriving operations from use cases
-) Identifying design flaws early to take corrective action
-) Focusing on resources rather than actions

Communicating the specification

) Constructing reusable service actions



-) Expressing your design as a specification

Messaging for services

-) Formatting the operation's messages
-) Evolving messages from the SOA design

Finalizing the service design

-) Specifying operations and endpoints
-) Binding messages to operations

Transitioning from Design to Implementation

Planning for implementation

-) Picking the right technology set
-) Matching technology to the four SOA scenarios
-) Dealing with long-running business processes

Building services

-) Creating services from the SOA modeling process
-) Developing service consumers
-) Orchestrating services to deliver new functionality

Structuring services

-) Merging interoperability with performance with Star pattern
-) Providing for responsive Ajax applications

Avoiding Common Problems

Applying "Lessons Learned" to improve designs

-) Facilitating asynchronous services
-) Dealing with change and growth

Ensuring performance

-) "Chatty" vs. "Chunky" messages
-) Combining services through effective message design

Managing the SOA Environment

Instituting governance

-) Advancing up the Services Integration Maturity Model
-) Leveraging Enterprise Services Buses (ESB)